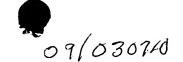
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## COMMUNICATIONS INTERFACE AND CONFLICT AVOIDANCE USING A SOFTWARE SIMULATION OF A UART Peter C. Chen

## 5 ABSTRACT OF THE DISCLOSURE

A computer system includes a software UART emulation and uses standard operating system protocols to minimized the chance of I/O conflicts between a serial device having a UART and a non-standard serial device which communicates through the UART emulation. A COM driver which can replace a standard COM driver in an operating environment such as provided by Microsoft  $WINDOWS^{TM}$  contains the UART emulation. The COM driver also sets the device address of the non-standard device on an ISA bus by determining the device addresses of COM port I/O slots used by UARTs, sending a predetermined pattern on the ISA bus to indicate a device address is to come, and then sending a value indicating a device address not used by the UARTs. pattern has a length sufficient to make inadvertent generation of the pattern unlikely. The non-standard device recognizes the predetermined pattern and selects a device address according to the value from the COM driver.